IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:	)
	: Examiner: V. Bali
KIERAN GERARD LARKIN ET AL.	)
	: Group Art Unit: 2623
Appl. No.: 09/754,310	)
	: Confirmation No. 3335
Filed: January 5, 2001	)
	:
For: DEMODULATION AND PHASE	)
ESTIMATION OF TWO-	:
DIMENSIONAL PATTERNS	)
	:
U.S. Patent No.: 7,043,082 B2	)
	:
Issued: May 9, 2006	) January 4, 2007

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF CORRECTION
UNDER RULES 322 AND 323

Sir:

         It is respectfully requested that a Certificate of Correction be issued by the

Patent and Trademark Office due to errors, which appear in the printed patent as a result of

Patent and Trademark Office mistakes, and mistakes of a clerical, typographical, or minor

character, which are not the fault of the Patent and Trademark Office. A Certificate of

Correction form is attached.

         Please charge Deposit Account No. 50-3939 the $100.00 fee for the

Certificate of Correction.

Patentees' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

Lock See Yu-Jahnes
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Registration No.: 38,667

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NY_MAIN 610346v1

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,043,082 B2

DATED : May 9, 2006

INVENTOR(S) : KIERAN GERARD LARKIN ET AL.

Page 1 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 1

Line 16, "x-ray" should read --x-ray.--.

COLUMN 3

Line 48, "comprises." should read --comprises:--.

COLUMN 5

Line 21, "an" should be deleted.
Line 54, "f(x, y)=a(x, y)+b(x, y), cos [2π ($u_o\{x-x_o\}+v_o\{y-y_o\}$)-$\chi$]" should read
--f(x, y)=a(x, y)+b(x, y). cos [2π ($u_o\{x-x_o\}+v_o\{y-y_o\}$)+$\chi$]--.

COLUMN 6

Line 20, "wherein $i=\sqrt{b-1}$" should read --wherein $i=\sqrt{-1}$--.
Line 34, "satisfies" should read --satisfy--.

COLUMN 7

Line 5, "P(u, v)=exp[iX(u, v)]=P(-u, -v)=-exp[i(X(u, v)+π)]" should read
--P(u, v)=exp[iχ(u, v)]=-P(-u, -v)=-exp[i(X(u, v)+π)]--.
Line 35, "G_Ω(u, v)=(B_Ω(u-u_o, v-v_o)exp[iX]+B_Ω(u+u_o, v+v_o) exp[-iχ])$e^{-2\pi(ux0+vy0)}$" should
read
--G_Ω(u, v)=(B_Ω(u-u_o, v-v_o)exp[iχ]+B_Ω(u+u_o, v+v_o) exp[-iχ])$e^{-2\pi i(ux0+vy0)}$--.

COLUMN 9

Line 19, "an" should read --a--.

UNITED STATES PATENT AND TRADEMARK OFFICE
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 10

Line 29, "2-dimensions,)" should read --2-dimensions),--.

COLUMN 11

Line 56, "$2\pi(u+iv)\underline{=}2\pi q.\exp(i\phi)$" should read --$2\pi(u+iv)\underline{=}2\pi q.\exp(i\varphi)$--.

COLUMN 12

Lines 6-9, "$2\pi i)q \exp(i\phi)G(u, v) \Longleftrightarrow D\{g(x, y)\}$ (31)
         $(2\pi i)^2 q^2 \exp(2i\phi)G(u, v) \Longleftrightarrow D^2\{g(x, y)\}$"   (32)
    should read
      --$2\pi i)q \exp(i\varphi)G(u, v) \Longleftrightarrow D\{g(x, y)\}$ (31)
         $(2\pi i)^2 q^2 \exp(2i\varphi)G(u, v) \Longleftrightarrow D^2\{g(x, y)\}$ (32)--.
Line 16, "is" should read --are--.
Line 23, "is" should read --are--.
Line 49, "operator" should read --operator.--.
Line 61, "$\exp(i\phi)G \Longleftrightarrow D_M\{g(x, y)\}$ (33)" should read
      --$\exp(i\varphi)G \Longleftrightarrow D_M\{g(x, y)\}$ (33)--.

COLUMN 13

Line 24, "greylevels" should read --grey levels--.
Line 44, "and 14E," should read --and 14E.--.

COLUMN 15

Line 34, "is" should be deleted.
Line 67, "patterns ie." should read --patterns, i.e.,--.

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PATENT NO.   :   7,043,082 B2

DATED   :   May 9, 2006

INVENTOR(S) :   KIERAN GERARD LARKIN ET AL.   Page 3 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 16

"$V\{f(x, y)\}=F^{-1}\{\exp[i\phi]F\{f(x, y)\}\}$ (41)
$F\{f(x, y)\}=F(u, v)=$

$\int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} f(x, y)\exp[-2\pi i(ux+vy)]dxdy$
$F^{-1}\{F(x, y)\}=f(x, y)=$

$\int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} f(u, v)\exp[+2\pi i(ux+vy)]dudv$
$u=q\cos\phi\}$
$v=q\sin\phi\}$"
should read
$--V\{f(x, y)\}=F^{-1}\{\exp[i\phi]F\{f(x, y)\}\}$
$F\{f(x, y)\}=F(u, v)=$

$\int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} f(x, y)\exp[-2\pi i(ux+vy)]dxdy$
$F^{-1}\{F(x, y)\}=f(x, y)=$

$\int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} f(u, v)\exp[+2\pi i(ux+vy)]dudv$
$u=q\cos\phi\}$
$v=q\sin\phi\}--.$

COLUMN 17

Line 27, "compensating" should read --compensated--.

PATENT NO.   :   7,043,082 B2

DATED   :   May 9, 2006

INVENTOR(S)   :   KIERAN GERARD LARKIN ET AL.   Page 4 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 18

Line 4, "advantage" should read --advantageous--.

Line 47, "$\alpha_{nm}=\text{Arg}\{ig_{nm}-i\,\exp[-i\beta_c]V\{g_{nm}\}\}\approx h[\chi+(\delta m+\delta n)/2]$" should read
--$\alpha_{nm}=\text{Arg}\{ig_{nm}-i\,\exp[-i\beta_c]V\{g_{nm}\}\}\approx h[\chi+(\delta m+\delta n)/2]$

COLUMN 19

Line 42, "$h_c(x,\,y)=\alpha_{nm}-\alpha_{mk}$ "

$$\overline{|\alpha_{nm}-\alpha_{mk}|}\quad \text{should read}$$

--$h_c(x,\,y)=\alpha_{nm}-\alpha_{mk}$ "

$$\overline{|\alpha_{nm}-\alpha_{mk}|}\text{--}.$$

Line 53, "an" should be deleted.

COLUMN 21

Line 30, "a" (second occurrence) should read --an--.

COLUMN 22

Line 11, "sponds" should read --spond--.

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CERTIFICATE OF CORRECTION

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INVENTOR(S) :   KIERAN GERARD LARKIN ET AL.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 25

Line 14, "value" should read --values--.

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